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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/575,695 | 04/13/2006 | Joachim Bamberg | 4937/PCT | 1818 |
| 21553 7590 04/03/2008 FASSE PATENT ATTORNEYS, P.A. P.O. BOX 726 HAMPDEN, ME 04444-0726 | | | | |
| EXAMINER | | | | |
| THOMAS, ALEXANDER S | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 1794 | | | | |
| MAIL DATE | | DELIVERY MODE | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/575,695

Applicant(s)

BAMBERG ET AL.

Examiner

Alexander Thomas

Art Unit

1794

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-44 is/are pending in the application.
- 4a) Of the above claim(s) 32-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-31 and 40-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 4/13/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I in the reply filed on 2/15/08 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Information Disclosure Statement

2. The documents cited on applicant's IDS but not considered were not considered because copies of the documents were not provided.

Specification

3. The disclosure is objected to because of the following informalities: the references to the canceled claims on page 3 must be canceled.

Appropriate correction is required.

Claim Objections

4. Claims 25 and 30 are objected to because of the following informalities: The terms "portion" and "section" appear to be used interchangeably in these claims. Use of one or the other term is required to provide clear antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. Claim 41 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 40 defines the product as being consolidated. Claim

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42, which depends on claim 40, defines the product as not being consolidated.

Therefore, an ambiguity exists and the claim is indefinite. For examination purposes, claim 41 will be considered to be directed to a consolidated product.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 25, 27, 31, 40-42 and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Ress et al 6,916,550. The reference discloses a composite annular product comprising a metal matrix and spirally wound reinforcing fibers wherein there are portions of the product adjacent the inner and outer edges that do not contain the reinforcing fiber; see Figure 5 and column 4, lines 15-42. The reinforcing fibers may be included as layers that are staggered; see Figure 8 which shows grooves for containing the fibers that will result in such a structure. Concerning claim 40, the phrase "in that a groove ... around said at least one reinforcing fiber" is a process limitation that does not add any structurally distinguishing features to the final product. For example, the depth of the groove is not found in the final product because consolidation eliminates the

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groove structure. Concerning claim 42, "joined ... diffusion welding" is a process limitation that does not add any structurally distinguishing features to the final product.

8. Claims 25, 27, 31 and 40-44 rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ress et al 6,261,699. The reference discloses a composite annular material comprising a metal matrix and spirally wound reinforcing fiber wherein there are portions of the product adjacent the inner and outer edges that do not contain the reinforcing fiber. The reinforcing fibers may be included as layers that are staggered. See the Figures.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ress et al 6,916,550. The reference discloses a composite annular material comprising a metal matrix and spirally wound reinforcing fiber wherein there are portions of the product adjacent the inner and outer edges that do not contain the reinforcing fiber; see Figure 5 and column 4, lines 15-42. Concerning the claimed materials, it would have been obvious to one of ordinary skill in the art select any well-known material, such as titanium and silicon carbide, as the matrix and fiber materials, respectively, in the product of the reference since it has been held to be within the general skill of a worker

in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

11. Claims 26, 28, 30 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ress et al 6,916,550 in view of either Ress et al 6,261,699 or Woods et al 5,337,940. The primary reference discloses a composite annular material comprising a metal matrix and spirally wound reinforcing fiber wherein there are portions of the product adjacent the inner and outer edges that do not contain the reinforcing fiber; see Figure 5 and column 4, lines 15-42. The secondary references disclose products similar in structure to that of the primary reference wherein the fiber reinforcement layers are staggered at the outer edges of their products; see Figure 12 of Ress et al ('699) and Figures 1c and 2b of Woods et al. It would have been obvious to one of ordinary skill in the art to alternate the coverage, i.e. alternate the radial width, of the reinforcing fiber layers in the product of the primary reference in view of the teachings in the secondary references depending on the final shape required for a particular end use.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Thomas whose telephone number is 571-272-1502. The examiner can normally be reached on 6:30-4:00 M-THUR.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander Thomas/
Primary Examiner
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